

ABSTRACT

The present invention relates to arthropod esterase proteins; to arthropod esterase nucleic acid molecules, including those that encode such esterase proteins; to antibodies raised against such esterase proteins; and to other compounds that inhibit arthropod
5 esterase activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising such proteins, nucleic acid molecules, antibodies and/or inhibitory compounds as well as the use of such therapeutic compositions to protect animals from hematophagous arthropod infestation.